Amendments to the Claims:

This listing of claims replaces all prior versions, and listings, of claims in this application.

Listing of Claims:

- 1. (Previously Presented) A method for the diagnosis of a neurological condition in a human subject, wherein said neurological condition is selected from the group consisting of: Alzheimer's disease; incipient Alzheimer's disease; possible Alzheimer's disease; and Alzheimer's disease associated with evidence of other type of dementia; wherein said method comprises the steps of:
- (A) determining the effectiveness of the G1/S cell cycle checkpoint exhibited by a non-neuronal cell of said subject; and
- (B) comparing said determined G1/S cell cycle checkpoint effectiveness with the G1/S cell cycle checkpoint effectiveness exhibited by a non-neuronal reference cell of a healthy individual or of an individual having said neurological condition, to thereby diagnose whether said subject has said neurological condition.
- 2. (Previously Presented) The method of claim 1 wherein said neurological condition is Alzheimer's disease.
- 3. (Currently Amended) The method of any of claims 1-2 wherein said step (A) is carried out by: inducing cell division in said non-neuronal cell and testing responsiveness of said non-neuronal cell of said subject to a cell division G1 inhibitor substance, wherein reduced responsiveness to said cell division G1 inhibitor substance **indication of** by said non-neuronal cell of said subject relative to that of a non-neuronal reference cell of a healthy individual indicates decreased effectiveness of the G1/S cell cycle checkpoint.

4. (Canceled)

5. (Previously Presented) The method of any of claims 1-2 wherein said step (A) is carried out by: inducing cell division in said non-neuronal cell and testing responsiveness of said non-neuronal cell of said subject to a stimulus that induces G1 cell cycle arrest, wherein a

reduced responsiveness to said stimulus by said non-neuronal cell of said subject relative to that of a non-neuronal reference cell of a healthy individual indicates decreased effectiveness of the G1/S cell cycle checkpoint.

6. (Previously Presented) The method of claim 5, wherein the stimulus that induces cell cycle arrest is selected from oxidative stress, ionizing radiation, hypoxia, or UV radiation.

7. (Canceled)

8. (Previously Presented) The method of claim 3, wherein the responsiveness of said non-neuronal cell of said subject to said cell division G1 inhibitor substance is determined by calculating the relative lengthening of the G1 phase of the cell cycle in said non-neuronal cell of said subject, wherein a reduced relative lengthening of the G1 phase following treatment with said cell division G1 inhibitor substance relative to that of a non-neuronal reference cell of a healthy individual indicates decreased effectiveness of the G1/S cell cycle checkpoint.

9-16. (Canceled)

17. (Previously Presented) The method of any of claims 1-2, wherein said non-neuronal cell of said subject is a lymphocyte.

18-29. (Canceled)

- 30. (Previously Presented) The method of claim 1, wherein said neurological condition is incipient Alzheimer's disease.
- 31. (Previously Presented) The method of claim 1, wherein said neurological condition is possible Alzheimer's disease.
- 32. (Previously Presented) The method of claim 1, wherein said neurological condition is probable Alzheimer's disease.

33. (Canceled)

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34. (Previously Presented) The method of claim 5, wherein the responsiveness of said non-neuronal cell of said subject to said stimulus that induces G1 cell cycle arrest is determined by calculating the relative lengthening of the G1 phase of the cell cycle in said non-neuronal cell of said subject, wherein a reduced relative lengthening of the G1 phase following exposure to said stimulus that induces G1 cell cycle arrest relative to that of a non-neuronal reference cell of a healthy individual indicates decreased effectiveness of the G1/S cell cycle checkpoint.

35-40. (Canceled)